

ABSTRACT OF THE DISCLOSURE

The present invention provides method and apparatus of digital video stream decoding. At least one compressed bit stream and decoded block pixels are saved in a storage device for comparing to a target block to determine whether one of previously decoded and saved blocks can be used to represent a target block. A lossless compression mechanism is applied to reduce the amount of pixel data during storing the decoded block pixels. A lossy method is applied in decoding the video stream if a sum of weighted differences of DCT coefficients between the closet block and a target block is less than a predetermined threshold.